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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/563,996

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James Colthurst

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ANDRUS, SCEALES, STARKE & SAWALL, LLP  
100 EAST WISCONSIN AVENUE, SUITE 1100  
MILWAUKEE, WI 53202

EXAMINER

PATTON, AMANDA K

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,996	<b>Applicant(s)</b> COLTHURST, JAMES	
	<b>Examiner</b> Amanda Patton	<b>Art Unit</b> 3762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-34 and 44-46 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 45 and 46 is/are allowed.
- 6) ☒ Claim(s) 24,25,28-31,33,34 and 44 is/are rejected.
- 7) ☒ Claim(s) 26,27 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/11/8</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment dated February 11, 2008 is acknowledged. In response to the amendment to claim 27, the rejection under 35 U.S.C. 112, second paragraph has been withdrawn. Currently claims 24-34 and 44-46 are pending in this application.

The indicated allowability of claims 25 is withdrawn in view of the newly interpreted reference to Yomtov. Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25, 28-31, 33-34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kairis (EP 0 145 176) in view of Yomtov (USPN 4,630,615 as cited by Applicant).

Regarding **claims 25 and 33**, Kairis teaches a treatment device comprising (e.g. Figure 1,2; Page 4, line 20 – page 6, line 25): a pair of electrodes 2a and 2b; a pulse generator 12; a detector 2; an integrated circuit 5 responsive to the detector output signals; LEDs 13a to 13e and speaker 6 activated by the monitoring means capable of generating a first indication in the form of the LEDs when a predetermined level of responsivity is reach and a second indication from

Art Unit: 3762

the LEDs that the treatment is finished (e.g. page 10, lines 30-35) and wherein the current that is applied is a piezo-current that is a repeated AC waveform (e.g. Page 6).

Kairis does not teach a detector that is capable of generating detector output signals in the form of pulses whose duration represents the impedance, monitoring means that measures the duration  $t$  of each pulse, and indicating means that is arranged to generate each indication when  $t$  satisfies a predetermined function of  $t$ . Yomtov teaches that it was well known in the art at the time the invention was made to use a detector that generates detector output signals in the form of pulse whose duration represents the skin impedance (e.g. ramp reference voltage 82); a monitoring means that measures the duration of each pulse (e.g. microprocessor 26 that counts the pulses 99 and thus generates a time  $t$ ; Col. 5, lines 1-50), and indicating means that is arranged to generate each indication when  $t$  satisfies a predetermined function of  $t$  (e.g. storage of  $t$  and transfer to telemetry circuitry 40 which indicates to a physician that the impedance has changed; Col. 6, 1-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the device and method for determining impedance of Yomtov in the device of Kairis since such a modification would provide the system with the ability to reliably measure impedance for providing the predictable results of a more accurate treatment device.

Regarding **claim 28**, neither Kairis nor Yomtov disclose a treatment device in which the AC waveform is a decaying sinusoidal waveform. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Kairis and Yomtov with a decaying sinusoidal waveform, since it was known in the art that a decaying sinusoidal waveform is used to provide the predictable results of a more accurate impedance

measurement device. Additionally, the locating of initial amplitude  $V_{\text{peak}}$ , half wavelength  $t_1$ , and decay  $t_{\text{decay}}$  on a decaying sinusoidal waveform are also well known in the art.

Regarding **claim 29**, Kairis additionally teaches that the pulse frequency, and thus the repetition rate, can be variably set by the user (e.g. page 6).

Regarding **claims 30 and 31**, Kairis disclose the claimed invention including a comparator inherently located in IC circuit 5 that allows switch 3 to be automatically turned on to apply voltage through the electrodes when a low-resistance point is located. If the device of Kairis is to be automatically turned on when a low-resistance point is located, there must be an inherent threshold located in the device. Kairis does not disclose a detector for generating output pulses whose duration is determined by the threshold level. Yomtov teaches that it is known in the art to have output pulses whose duration is determined by the threshold level and represents skin impedance (e.g. ramp reference voltage 82; Col. 5, lines 1-50). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system as taught by Kairis with output pulses whose duration is determined by the threshold level and represents skin impedance, since such a modification would provide the system with output pulses for providing the predictable results of a more accurate way to determine impedance.

Regarding **claim 34**, Kairis additionally teaches device powered by battery 7 (e.g. page 4, lines 30-35).

Regarding **claim 44**, Kairis discloses the method of treating a living body through the skin, comprising the steps of (e.g. Figure 1,2; Page 4, line 20 – page 6, line 25): placing a pair of electrodes 2a and 2b in contact with the skin; generating a waveform to supply electrical impulses through the electrodes to the skin a pulse generator 12; detecting changes in the skin

Art Unit: 3762

impedance through sensor 2; monitoring the responsivity of the skin through integrated circuit 5; and indicating through LEDs 13a to 13e and speaker 6 a first indication in the form of the LEDs when a predetermined level of responsivity is reach and a second indication from the LEDs that the treatment is finished (e.g. page 10, lines 30-35) and wherein the current that is applied is a piezo-current that is a repeated AC waveform.

Kairis does not teach a detector that is capable of generating detector output signals in the form of pulses whose duration represents the skin impedance and the monitoring means that measures the duration  $t$  of each pulse. Yomtov teaches that it was well known in the art at the time the invention was made to use a detector that generates detector output signals in the form of pulse who duration represents the skin impedance (e.g. ramp reference voltage 82); a monitoring means that measures the duration of each pulse (e.g. microprocessor 26 that counts the pulses 99 and thus generates a time  $t$ ; Col. 5, lines 1-50), and indicating means that is arrange to generate each indication when  $t$  satisfies a predetermined function of  $t$  (e.g. storage of  $t$  and transfer to telemetry circuitry 40 which can indicate to a physician that the lead impedance has changed; Col. 6, 1-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the device and method for determining impedance of Yomtov in the method of Kairis since such a modification would provide the system with the ability to reliably measure impedance for providing the predictable results of a more accurate treatment device.

**Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Kairis and Yomtov as applied to claim 25 above, and further in view of Masopust (USPN. 5,339,827 as previously

Art Unit: 3762

cited). Kairis and Yomtov discloses the claimed invention except a means responsive to the detector output signal for producing output data representing the responsivity of different zones of a pre-determined area of the body, a store for the output data, and means for selecting a treatment zone from amongst the different zones based on an evaluation of the output data to select the zone of greatest responsivity. Masopust teaches a PC 50 and screen 51 for producing output data representing the responsivity of different zones, computer memory 52 for storage of the output data, and means for selecting a treatment zone from amongst the different zones based on an evaluation of the output data to select the zone of greatest responsivity (e.g. Figures 1, 6-8; Col. 5 line 1 – Col. 6 line 70). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the treatment device as taught by Kairis and Yomtov with the creation, storage, and use of output data of Masopust for providing the predictable result of a system capable of more accurately determining acupuncture points.

***Allowable Subject Matter***

**Claims 45 and 46** are allowed. Nowhere in the art of record is monitoring means found that measure the duration of the output pulse created by the comparator in combination with the other elements of the claims.

**Claims 26-27 and 32** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda Patton whose telephone number is (571) 270-1912. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/AKP/  
Examiner, Art Unit 3762

/George R Evanisko/  
Primary Examiner, Art Unit 3762